

March 20, 2018

Sale Day Report for

City of Whitewater, Wisconsin \$6,540,000 General Obligation Corporate Purpose Bonds, Series 2018A



Prepared by:

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and

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Sale Day Report – March 20, 2018

City of Whitewater, Wisconsin \$6,540,000 General Obligation Corporate Purpose Bonds, Series 2018A

Purpose: For the public purposes of paying the cost of sanitary sewerage

projects, storm sewer improvements, water system projects, street improvement projects and to current refund certain outstanding

obligations of the City.

Rating: Moody's Investor's Service "Aa3"

Number of Bids: 6

Low Bidder: Janney Montgomery Scott LLC, Philadelphia, Pennsylvania

Comparison from Interest Low Bid High Bid Difference Bid: 3.0614% 3.2064% \$88,580

Summary of Results:	Results of Sale
Principal Amount:	\$6,540,000
Underwriter's Discount:	\$33,321
Reoffering Premium:	\$256,326
True Interest Cost:	3.0596%
Costs of Issuance:	\$63,025
Yield:	1.75% - 3.15%
Total P&I	\$9,228,726

Notes: Total principal and interest is \$292,294 less than the pre-sale

estimate.

Closing Date: April 11, 2018

Common Council

Action:

Adopt a resolution awarding the sale of \$6,540,000 General

Obligation Corporate Purpose Bonds, Series 2018A.

Attachments: • Bid Tabulation

Sources and Uses of Funds

• Tax Impact Analysis

• Utility Debt Summary

• Debt Service Allocations (for reference)

Rating Report



BID TABULATION

\$6,850,000* General Obligation Corporate Purpose Bonds, Series 2018A

City of Whitewater, Wisconsin

SALE: March 20, 2018

AWARD: JANNEY MONTGOMERY SCOTT LLC

Rating: Moody's Investor's Service "Aa3"

BBI: 3.89% Bank Qualified

NAME OF BIDDER	MATURITY (September 1)	RATE	REOFFERING YIELD	PRICE	NET INTEREST COST	TRUE INTEREST RATE
JANNEY MONTGOMERY SCOTT				\$7,081,437.00	\$2,593,959.53	3.0614%
LLC				Ψ7,001,137.00	Ψ2,575,757.55	3.001170
Philadelphia, Pennsylvania	2019	2.000%	1.750%			
1	2020	3.000%	1.800%			
	2021	4.000%	1.900%			
	2022	5.000%	2.100%			
	2023	5.000%	2.250%			
	2024	5.000%	2.350%			
	2025	5.000%	2.450%			
	2026	5.000%	2.550%			
	2027	3.000%	2.650%			
	2028	3.000%	2.750%			
	2029	3.000%	2.850%			
	2030^{1}	3.250%	3.150%			
	2031^{1}	3.250%	3.150%			
	2032^{1}	3.250%	3.150%			
	2033^{1}	3.250%	3.150%			
	2034^{1}	3.250%	3.150%			
	2035^{1}	3.250%	3.150%			
	2036^{1}	3.250%	3.150%			
	2037^{1}	3.250%	3.150%			



^{*} Subsequent to bid opening the issue size was decreased to \$6,540,000.

Adjusted Price - \$6,763,004.93 Adjusted Net Interest Cost - \$2,465,721.48 Adjusted TIC - 3.0596%

¹ \$3,690,000 Term Bond due 2037 with mandatory redemption in 2030-2036.

NAME OF BIDDER	MATURITY (September 1)	RATE	REOFFERING YIELD	PRICE	NET INTEREST COST	TRUE INTEREST RATE
BOK FINANCIAL SECURITIES,				\$6,859,440.00	\$2,570,976.86	3.0744%
INC.						
Milwaukee, Wisconsin	2019	3.000%				
	2020	3.000%				
First Citizens State Bank	2021	3.000%				
Whitewater, WI	2022	3.000%				
	2023	3.000%				
	2024 2025	3.000% 3.000%				
	2026	3.000%				
	2027	3.000%				
	2028	3.000%				
	2029	3.000%				
	2030	3.000%				
	2031	3.000%				
	2032	3.000%				
	2033	3.125%				
	2034	3.125%				
	2035	3.125%				
	2036	3.250%				
	2037	3.250%				
PIPER JAFFRAY				\$6,845,517.65	\$2,638,081.49	3.1559%
Minneapolis, Minnesota	2019	3.000%		+ - , - - , - · ·	, ,,	
1	2020	3.000%				
	2021	3.000%				
	2022	3.000%				
	2023	3.000%				
	2024	3.000%				
	2025	3.000%				
	2026	3.000%				
	2027	3.000%				
	2028	3.000%				
	2029	3.000%				
	2030 2031	3.000% 3.000%				
	2032	3.125%				
	2032	3.125%				
	2034	3.125%				
	2035	3.250%				
	2036	3.230%				
	2037	3.375%				
	_ 50 ,	2.2.0.0				

NAME OF BIDDER	MATURITY (September 1)	RATE	REOFFERING YIELD	PRICE	NET INTEREST COST	TRUE INTEREST RATE
NORTHLAND SECURITIES, INC. Minneapolis, Minnesota	2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037	3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.125% 3.125% 3.250%		\$6,816,446.00	\$2,635,706.97	3.1634%
FTN FINANCIAL CAPITAL MARKETS	2010	2 0000/		\$6,892,497.10	\$2,690,251.51	3.2003%
Memphis, Tennessee	2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037	3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.000% 3.250% 3.250% 3.250% 3.500% 3.500% 3.500%				

NAME OF BIDDER	MATURITY (September 1)	RATE	REOFFERING YIELD	PRICE	NET INTEREST COST	TRUE INTEREST RATE
BAIRD				\$6,882,892.85	\$2,682,539.78	3.2064%
Milwaukee, Wisconsin	2019	3.000%		ψ0,002,072.03	Ψ2,002,557.70	3.200170
Willwaukee, Wisconsin	2020	3.000%				
	2021	3.000%				
	2022	3.000%				
	2022	4.000%				
	2023	4.000%				
	2024	4.000%				
	2023	4.000%				
	2027	3.000%				
	2028	3.000%				
	2029	3.000%				
	2030	3.000%				
	2031	3.000%				
	2032	3.125%				
	2033	3.125%				
	2034	3.250%				
	2035	3.250%				
	2036	3.375%				
	2037	3.500%				



2018 Estimated Financing Plan: G.O. Bonds

					ESTIMATE	FINAL
					G.O. Bonds	G.O . Bonds
	Sewer	Water	Storm	Street	2018	2018
Infrastruture Projects						
Franklin / Ann	489,250	530,125	661,975	744,263	2,425,613	2,425,613
Ann Det. Basin	128,915		300,000		428,915	428,915
Dann/Easterly	236,063	258,750	44,719	407,188	946,720	946,720
City CIP Projects	,	,	,	,	,	•
Street Light Replacements				175,000	175,000	175,000
Utility CIP Projects				270,000	1.5,000	175,000
Hoist, wetwell rehab, roofing repairs	214,000				214,000	214,000
North Freemont Street Drainage	214,000		12,000		12,000	12,000
Chemical Scales		25.000	12,000		·	-
		25,000			25,000	25,000
Well #7 Back Up Generator		64,502			64,502	64,502
SCADA Upgrade		200,000			200,000	200,000
Industrial Dr.		240,000			240,000	240,000
Subtotal Project Funds	1,068,228	1,318,377	1,018,694	1,326,451	4,731,750	4,731,750
Loca Other Devenue Severes						
Less Other Revenue Sources			(470.000)	(20.274)	(500,000)	(FOC 200)
CDBG-PF Grant	(24.4.222)		(479,626)	(20,374)	(500,000)	(500,000)
Fund Balance	(214,000)		(12,000)		(226,000)	(226,000)
Subtotal Other Revenues	(214,000)	0	(491,626)	(20,374)	(726,000)	(726,000)
Total Projects Amount	854,228	1,318,377	527,068	1,306,077	4,005,750	4,005,750
5.6 11						
Refunding						
GO Prom Note - Bank Note Commercial Bank	K					
Principal due April 15, 2018					1,350,000	1,350,000
Interest due April 15, 2018					9,585	9,585
Less funds budgeted in 2018					(9,585)	(9,585)
GO Prom Note - Bank Note 1st Citizens State	Bank					
Principal due April 15, 2018					1,350,000	1,350,000
Interest due April 15, 2018					19,305	19,305
Less funds budgeted in 2018					(19,305)	(19,305)
Estimated Finance Related Expenses						
Municipal Advisor					27,600	27,600
Bond Counsel					13,000	11,890
Disclosure Counsel					7,800	7,735
					·	
Rating Agency Fee					15,000	15,000 800
Paying Agent (if retained)					675	
Underwriter Discount				12	. 50 85,625 5.09	33,321
Underwriter Discount Original Issue Premium (built into rates)			12	85,625 5.09	
)			12		33,321
Original Issue Premium (built into rates) Total Financing Required)				6,855,450	33,321 (256,326) 6,545,770
Original Issue Premium (built into rates)				0	33,321 (256,326)
Original Issue Premium (built into rates) Total Financing Required Estimated Interest)				0 6,855,450 25% (5,920) 0.25 %	33,321 (256,326) 6,545,770
Original Issue Premium (built into rates) Total Financing Required Estimated Interest Assumed spend down (months))				6,855,450 (5,920) 0.25% 6 6	33,321 (256,326) 6,545,770 (5,920)
Original Issue Premium (built into rates) Total Financing Required Estimated Interest Assumed spend down (months) Rounding Net Issue Size)				6,855,450 (5,920) 0.25% 6 470 6,850,000	33,321 (256,326) 6,545,770 (5,920) 150 6,540,000
Original Issue Premium (built into rates) Total Financing Required Estimated Interest Assumed spend down (months) Rounding Net Issue Size Sewer)				6,855,450 (5,920) 0.25% 6 470 6,850,000	33,321 (256,326) 6,545,770 (5,920) 150 6,540,000
Original Issue Premium (built into rates) Total Financing Required Estimated Interest Assumed spend down (months) Rounding Net Issue Size Sewer Water					6,855,450 (5,920) 0.25% 6 470 6,850,000 870,000 1,345,000	33,321 (256,326) 6,545,770 (5,920) 150 6,540,000 860,000 1,330,000
Original Issue Premium (built into rates) Total Financing Required Estimated Interest Assumed spend down (months) Rounding Net Issue Size Sewer Water Storm					6,855,450 (5,920) 0.25% 6 470 6,850,000 870,000 1,345,000 540,000	33,321 (256,326) 6,545,770 (5,920) 150 6,540,000 860,000 1,330,000 530,000
Original Issue Premium (built into rates) Total Financing Required Estimated Interest Assumed spend down (months) Rounding Net Issue Size Sewer Water Storm Street					6,855,450 (5,920) 0.25% 6 470 6,850,000 870,000 1,345,000 540,000 1,330,000	33,321 (256,326) 6,545,770 (5,920) 150 6,540,000 860,000 1,330,000 530,000 1,315,000
Original Issue Premium (built into rates) Total Financing Required Estimated Interest Assumed spend down (months) Rounding Net Issue Size Sewer Water Storm					6,855,450 (5,920) 0.25% 6 470 6,850,000 870,000 1,345,000 540,000 1,330,000 2,765,000	33,321 (256,326) 6,545,770 (5,920) 150 6,540,000 860,000 1,330,000 530,000 1,315,000 2,505,000
Original Issue Premium (built into rates) Total Financing Required Estimated Interest Assumed spend down (months) Rounding Net Issue Size Sewer Water Storm Street					6,855,450 (5,920) 0.25% 6 470 6,850,000 870,000 1,345,000 540,000 1,330,000	33,321 (256,326) 6,545,770 (5,920) 150 6,540,000 860,000 1,330,000 530,000 1,315,000



City of Whitewater, Wisconsin

Tax Impact Analysis: Including Proposed 2018 Financings

		Existing Debt							Proposed	Debt Issues							Levy and	Tax Rate		
					G.O .	Bonds		(G.O. Note (Ba	ank Loan)										
Year	Total G.O.				\$6,54	10,000			\$606,4	08								Total Tax Rate	Levy Change	
	Debt	Less: Non-levy		Dated Date:	04/	11/18		Dated Date:	06/	01/18		Less: Funds On				Total Net Debt	Projected TID	for debt	from prior	
	Payments	Revenues	Net Tax Levy	Principal (9/1)	Rate	Interest	Total	Principal (4/1)	Est. Rate	Interest	Total	Hand	Less: Water	Less: Sewer	Less: Storm	Service Levy	OUT EV	service	year	Year
2018			CEO 072			00.076	00.076				0	(64.776)	(25.200)			650.072	562.842.500	64.45		2018
	4 000 504	(4.202.527)	650,072	05.000	2.000/	90,076	90,076			45.460	15 160	(64,776)	(25,300)	(40.563)	(50.575)	, .	,	\$1.15	455.072	
2019	1,986,584	(1,282,537)	704,047	95,000	2.00%	231,625	326,625	FO CO4	2.000/	15,160	15,160		(131,750)	(49,563)	(58,575)	805,944	568,470,925	\$1.42	155,872	2019
2020 2021	1,981,339	(1,281,434)	699,904	205,000 235,000	3.00% 4.00%	229,725 223,575	434,725 458,575	59,691 61,482	3.00% 3.00%	18,192	77,883 77,883		(145,450)	(74,563)	(62,975)	929,525 927.951	574,155,634	\$1.62 \$1.47	123,581	2020 2021
	1,382,286	(682,006)	700,281			•				16,402	,		(143,050)	(103,813)	(61,925)		632,490,591	a	(1,574)	
2022	1,377,251	(672,795)	704,457	235,000	5.00%	214,175	449,175	63,326	3.00%	14,557	77,883		(139,850)	(106,613)	(60,525)	924,527	719,047,696	\$1.29	(3,424)	2022
2023	1,303,965	(662,578)	641,387	300,000	5.00%	202,425	502,425	65,226	3.00%	12,657	77,883		(135,850)	(108,613)	(58,775)	918,458	726,238,173	\$1.26	(6,069)	2023
2024	1,305,375	(660,990)	644,385	305,000	5.00%	187,425	492,425	67,183	3.00%	10,700	77,883		(146,850)	(105,363)	(57,025)	905,455	733,500,555	\$1.23	(13,003)	2024
2025	1,424,780	(657,897)	766,883	195,000	5.00%	172,175	367,175	69,198	3.00%	8,685	77,883		(142,100)	(102,113)	(55,275)	912,454	740,835,561	\$1.23	6,999	2025
2026	1,393,565	(622,910)	770,655	205,000	5.00%	162,425	367,425	71,274	3.00%	6,609	77,883		(137,350)	(108,863)	(53,525)	916,226	748,243,916	\$1.22	3,772	2026
2027	1,392,123	(618,485)	773,638	215,000	3.00%	152,175	367,175	73,413	3.00%	4,471	77,883		(137,600)	(110,113)	(51,775)	919,208	755,726,356	\$1.22	2,983	2027
2028	977,863	(452,650)	525,213	430,000	3.00%	145,725	575,725	75,615	3.00%	2,268	77,883		(134,600)	(107,713)	(55,725)	880,783	763,283,619	\$1.15	(38,425)	2028
2029	975,470	(453,008)	522,463	430,000	3.00%	132,825	562,825						(131,600)	(105,313)	(54,525)	793,850	770,916,455	\$1.03	(86,933)	2029
2030	389,050	(31,950)	357,100	445,000	3.25%	119,925	564,925						(133,600)	(102,913)	(63,325)	622,188	778,625,620	\$0.80	(171,663)	2030
2031	387,188	(30,975)	356,213	450,000	3.25%	105,463	555,463						(130,188)	(105,313)	(61,700)	614,475	786,411,876	\$0.78	(7,713)	2031
2032	0	0	0	460,000	3.25%	90,838	550,838						(131,775)	(107,550)	(60,075)	251,438	794,275,995	\$0.32	(363,038)	2032
2033				465,000	3.25%	75,888	540,888						(128,200)	(104,625)	(58,450)	249,613	802,218,755	\$0.31	(1,825)	2033
2034				465,000	3.25%	60,775	525,775						(124,625)	(101,700)	(56,825)	242,625	810,240,942	\$0.30	(6,988)	2034
2035				465,000	3.25%	45,663	510,663						(121,050)	(98,775)	(60,200)	230,638	818,343,352	\$0.28	(11,988)	2035
2036 2037				470,000 470.000	3.25% 3.25%	30,550	500,550 485.275						(117,475)	(95,850)	(58,413)	228,813	826,526,785	\$0.28 \$0.26	(1,825)	2036
2037				470,000	3.25%	15,275	485,2/5						(123,900)	(92,925)	(51,625)	216,825	834,792,053	\$0.26	(11,988)	2037
2038																			(216,825)	2038
Total	16,276,837	(8,110,214)	8,816,695	6,540,000		2,688,726	9,228,726	606,408		109,702	716,110	(64,776)	(2,562,163)	(1,892,288)	(1,101,238)					Total

Notes:

1. Includes sale results of 3/20/2018

Includes sale results of 3/20/2018
 2022 EV includes projected closure of TID #4.

PRE-SALE ESTIMATE 9,521,020

DIFFERENCE (\$292,294)



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			1	Water Debt						Sewer Debt					Stor	rm Water		
Year					Debt Coverage Revenue Debt	Debt Coverage All Debt						ebt Coverage evenue Debt	Debt Coverag All Debt	e			Debt Coverage All Debt	
	Existing G.O.	Existing Revenue			(2016 Revenues	(2016 Revenues)	Existing G.O.	Existing Revenue			(20	016 Revenues)	(2016 Revenue	s) Existing G.O			(2016 Revenues)	
	Debt	Debt	2018 Bonds	TOTAL	\$ 845,247	\$ 845,247	Debt	Debt	2018 Bonds	TOTAL	\$	1,936,064	\$ 1,936,0	Debt Debt	2018 Bonds	TOTAL	\$ 132,758	Year
2018	\$45,922	\$152,284	\$25,300	\$223,506	5.55		\$24,950	\$805,638	\$0	\$830,588		2.40	2		\$0	\$104,929	1.27	2018
2019	\$39,163	\$149,306	\$131,750	\$320,219	5.66		\$18,908	\$1,863,094	\$49,563	\$1,931,564		1.04	1.0		\$58,575	\$159,275	0.83	2019
2020	\$38,713	\$151,149	\$145,450	\$335,311	5.59		\$18,683	\$1,865,839	\$74,563	\$1,959,084		1.04	0.9	,	\$62,975	\$167,450	0.79	2020
2021	\$43,203	\$152,763	\$143,050	\$339,015	5.53		\$18,428	\$1,863,527	\$103,813	\$1,985,767		1.04	0.9	,	\$61,925	\$174,965	0.76	2021
2022	\$42,538	\$154,063	\$139,850	\$336,450	5.49		\$18,143	\$1,861,083	\$106,613	\$1,985,838		1.04	0.9	. , .	\$60,525	\$171,750	0.77	2022
2023	\$41,838	\$155,188	\$135,850	\$332,875	5.45		\$17,843	\$1,863,450	\$108,613	\$1,989,905		1.04	0.9	,	\$58,775	\$168,125	0.79	2023
2024	\$41,068	\$150,973	\$146,850	\$338,890	5.60		\$17,513	\$1,860,675	\$105,363	\$1,983,550		1.04	0.9	98 \$112,355	\$57,025	\$169,380	0.78	2024
2025	\$40,280	\$151,758	\$142,100	\$334,138	5.57	2.53	\$17,175	\$1,862,672	\$102,113	\$1,981,959		1.04	0.9	98 \$110,218	\$55,275	\$165,493	0.80	2025
2026	\$44,440	\$151,905	\$137,350	\$333,695	5.56	2.53	\$16,815	\$1,859,435	\$108,863	\$1,985,112		1.04	0.9	98 \$107,968	\$53,525	\$161,493	0.82	2026
2027	\$43,420	\$66,853	\$137,600	\$247,873	12.64	3.41	\$16,433	\$1,860,954	\$110,113	\$1,987,499		1.04	0.9	7 \$110,590	\$51,775	\$162,365	0.82	2027
2028	\$42,340	\$0	\$134,600	\$176,940		4.78	\$16,028	\$1,743,950	\$107,713	\$1,867,690		1.11	1.	14 \$107,950	\$55,725	\$163,675	0.81	2028
2029	\$41,200		\$131,600	\$172,800		4.89	\$20,600	\$1,743,577	\$105,313	\$1,869,489		1.11	1.0	\$110,175	\$54,525	\$164,700	0.81	2029
2030	0		\$133,600	133,600		6.33	\$0	\$1,550,250	\$102,913	\$1,653,162		1.25	1.	7 \$31,950	\$63,325	\$95,275	1.39	2030
2031			\$130,188	130,188		6.49		\$1,549,942	\$105,313	\$1,655,255		1.25	1.	7 \$30,975	\$61,700	\$92,675	1.43	2031
2032			\$131,775	131,775		6.41		\$1,509,644	\$107,550	\$1,617,194		1.28	1.	20 \$0	\$60,075	\$60,075	2.21	2032
2033			\$128,200	128,200		6.59		\$1,509,334	\$104,625	\$1,613,959		1.28	1.	20	\$58,450	\$58,450	2.27	2033
2034			\$124,625	124,625		6.78		\$1,509,019	\$101,700	\$1,610,719		1.28	1.	20	\$56,825	\$56,825	2.34	2034
2035			\$121,050	121,050		6.98		\$1,508,696	\$98,775	\$1,607,471		1.28	1.	20	\$60,200	\$60,200	2,21	2035
2036			\$117,475	117,475		7.20		\$0	\$95,850	\$95,850			20.	20	\$58,413	\$58,413	2,27	2036
2037			\$123,900	123,900		6.82			\$92,925	\$92,925			20.	33	\$51,625	\$51,625	2.57	2037
2038																		2038
																		_
Total	504,122	1,436,239	2,562,163	4,502,524			221,515	30,190,781	1.892.288	32,304,583				1,365,899	1,101,238	2,467,137		Total



Allocation of Debt Service: 2018 G.O. Bonds (Commercial Bank Refunding Portion)

	L	evy Portion		W	ater Portion		Se	ewer Portion		Storn	n Water Port	ion		Totals		
Year	Principal (9/1)	Interest	Total	Principal (9/1)	Interest	Total	Principal (9/1)	Interest	Total	Principal (9/1)	Interest	Total	Principal	Interest	Total	Year
2018		8,293	8,293		3,656	3,656		3,441.67	3,442		1,847	1,847	0	17,238	17,238	2018
2019		21,325	21,325	10,000	9,400	19,400		8,850.00	8,850	5,000	4,750	9,750	15,000	44,325	59,325	2019
2020	30,000	21,325	51,325	10,000	9,200	19,200	15,000	8,850.00	23,850	5,000	4,650	9,650	60,000	44,025	104,025	2020
2021	30,000	20,425	50,425	10,000	8,900	18,900	10,000	8,400.00	18,400	5,000	4,500	9,500	55,000	42,225	97,225	2021
2022	30,000	19,225	49,225	10,000	8,500	18,500	10,000	8,000.00	18,000	5,000	4,300	9,300	55,000	40,025	95,025	2022
2023	30,000	17,725	47,725	10,000	8,000	18,000	10,000	7,500.00	17,500	5,000	4,050	9,050	55,000	37,275	92,275	2023
2024	30,000	16,225	46,225	15,000	7,500	22,500	10,000	7,000.00	17,000	5,000	3,800	8,800	60,000	34,525	94,525	2024
2025		14,725	14,725	15,000	6,750	21,750	10,000	6,500.00	16,500	5,000	3,550	8,550	30,000	31,525	61,525	2025
2026		14,725	14,725	15,000	6,000	21,000	15,000	6,000.00	21,000	5,000	3,300	8,300	35,000	30,025	65,025	2026
2027		14,725	14,725	15,000	5,250	20,250	15,000	5,250.00	20,250	5,000	3,050	8,050	35,000	28,275	63,275	2027
2028	45,000	14,725	59,725	15,000	4,800	19,800	15,000	4,800.00	19,800	5,000	2,900	7,900	80,000	27,225	107,225	2028
2029	45,000	13,375	58,375	15,000	4,350	19,350	15,000	4,350.00	19,350	5,000	2,750	7,750	80,000	24,825	104,825	2029
2030	45,000	12,025	57,025	15,000	3,900	18,900	15,000	3,900.00	18,900	10,000	2,600	12,600	85,000	22,425	107,425	2030
2031	45,000	10,563	55,563	15,000	3,413	18,413	15,000	3,412.50	18,413	10,000	2,275	12,275	85,000	19,663	104,663	2031
2032	45,000	9,100	54,100	15,000	2,925	17,925	15,000	2,925.00	17,925	10,000	1,950	11,950	85,000	16,900	101,900	2032
2033	45,000	7,638	52,638	15,000	2,438	17,438	15,000	2,437.50	17,438	10,000	1,625	11,625	85,000	14,138	99,138	2033
2034	45,000	6,175	51,175	15,000	1,950	16,950	15,000	1,950.00	16,950	10,000	1,300	11,300	85,000	11,375	96,375	2034
2035	45,000	4,713	49,713	15,000	1,463	16,463	15,000	1,462.50	16,463	10,000	975	10,975	85,000	8,613	93,613	2035
2036	50,000	3,250	53,250	15,000	975	15,975	15,000	975.00	15,975	10,000	650	10,650	90,000	5,850	95,850	2036
2037	50,000	1,625	51,625	15,000	488	15,488	15,000	487.50	15,488	10,000	325	10,325	90,000	2,925	92,925	2037
2038			0			0			0			0	0	0	0	2038
																•
Total	610,000	251,906	861,906	260,000	99,856	359,856	245,000	96,492	341,492	135,000	55,147	190,147	1,250,000	503,400	1,753,400	Total



Allocation of Debt Service: 2018 G.O. Bonds (1st Citizens Bank Refunding Portion)

, mocacic	Levy Portion Water Portion S															
	L	evy Portion		W	ater Portion		Se	wer Portion		Storn	n Water Port	ion		Totals		
Year	Principal (9/1)	Interest	Total	Principal (9/1)	Interest	Total	Principal (9/1)	Interest	Total	Principal (9/1)	Interest	Total	Principal	Interest	Total	Year
2018		8,308	8,308		3,656	3,656		3,597	3,597		1,847	1,847	0	17,408	17,408	2018
2019		21,363	21,363	10,000	9,400	19,400		9,250	9,250	5,000	4,750	9,750	15,000	44,763	59,763	2019
2020	15,000	21,363	36,363	10,000	9,200	19,200	10,000	9,250	19,250	5,000	4,650	9,650	40,000	44,463	84,463	2020
2021	30,000	20,913	50,913	10,000	8,900	18,900	5,000	8,950	13,950	5,000	4,500	9,500	50,000	43,263	93,263	2021
2022	30,000	19,713	49,713	10,000	8,500	18,500	10,000	8,750	18,750	5,000	4,300	9,300	55,000	41,263	96,263	2022
2023	30,000	18,213	48,213	10,000	8,000	18,000	15,000	8,250	23,250	5,000	4,050	9,050	60,000	38,513	98,513	2023
2024	30,000	16,713	46,713	15,000	7,500	22,500	15,000	7,500	22,500	5,000	3,800	8,800	65,000	35,513	100,513	2024
2025		15,213	15,213	15,000	6,750	21,750	15,000	6,750	21,750	5,000	3,550	8,550	35,000	32,263	67,263	2025
2026		15,213	15,213	15,000	6,000	21,000	15,000	6,000	21,000	5,000	3,300	8,300	35,000	30,513	65,513	2026
2027		15,213	15,213	15,000	5,250	20,250	15,000	5,250	20,250	5,000	3,050	8,050	35,000	28,763	63,763	2027
2028	45,000	15,213	60,213	15,000	4,800	19,800	15,000	4,800	19,800	5,000	2,900	7,900	80,000	27,713	107,713	2028
2029	45,000	13,863	58,863	15,000	4,350	19,350	15,000	4,350	19,350	5,000	2,750	7,750	80,000	25,313	105,313	2029
2030	45,000	12,513	57,513	15,000	3,900	18,900	15,000	3,900	18,900	10,000	2,600	12,600	85,000	22,913	107,913	2030
2031	45,000	11,050	56,050	15,000	3,413	18,413	15,000	3,413	18,413	10,000	2,275	12,275	85,000	20,150	105,150	2031
2032	45,000	9,588	54,588	15,000	2,925	17,925	15,000	2,925	17,925	10,000	1,950	11,950	85,000	17,388	102,388	2032
2033	50,000	8,125	58,125	15,000	2,438	17,438	15,000	2,438	17,438	10,000	1,625	11,625	90,000	14,625	104,625	2033
2034	50,000	6,500	56,500	15,000	1,950	16,950	15,000	1,950	16,950	10,000	1,300	11,300	90,000	11,700	101,700	2034
2035	50,000	4,875	54,875	15,000	1,463	16,463	15,000	1,463	16,463	10,000	975	10,975	90,000	8,775	98,775	2035
2036	50,000	3,250	53,250	15,000	975	15,975	15,000	975	15,975	10,000	650	10,650	90,000	5,850	95,850	2036
2037	50,000	1,625	51,625	15,000	488	15,488	15,000	488	15,488	10,000	325	10,325	90,000	2,925	92,925	2037
2038			0			0			0			0	0	0	0	2038
]
Total	610,000	258,820	868,820	260,000	99,856	359,856	250,000	100,247	350,247	135,000	55,147	190,147	1,255,000	514,070	1,769,070	Total



Allocation of Debt Service: 2018 G.O. Bonds (New Money)

	L	evy Portion		W	ater Portion		Se	ewer Portion		Storn	n Water Port	ion		Totals		
Year	Principal (9/1)	Interest	Total	Principal (9/1)	Interest	Total	Principal (9/1)	Interest	Total	Principal (9/1)	Interest	Total	Principal	Interest	Total	Year
2018		17,131	17,131		18,647	18,647		12,235	12,235		7,418	7,418	0	55,431	55,431	2018
2019		44,050	44,050	45,000	47,950	92,950		31,463	31,463	20,000	19,075	39,075	65,000	142,538	207,538	2019
2020	20,000	44,050	64,050	60,000	47,050	107,050		31,463	31,463	25,000	18,675	43,675	105,000	141,238	246,238	2020
2021	5,000	43,450	48,450	60,000	45,250	105,250	40,000	31,463	71,463	25,000	17,925	42,925	130,000	138,088	268,088	2021
2022		43,250	43,250	60,000	42,850	102,850	40,000	29,863	69,863	25,000	16,925	41,925	125,000	132,888	257,888	2022
2023	60,000	43,250	103,250	60,000	39,850	99,850	40,000	27,863	67,863	25,000	15,675	40,675	185,000	126,638	311,638	2023
2024	50,000	40,250	90,250	65,000	36,850	101,850	40,000	25,863	65,863	25,000	14,425	39,425	180,000	117,388	297,388	2024
2025		37,750	37,750	65,000	33,600	98,600	40,000	23,863	63,863	25,000	13,175	38,175	130,000	108,388	238,388	2025
2026		37,750	37,750	65,000	30,350	95,350	45,000	21,863	66,863	25,000	11,925	36,925	135,000	101,888	236,888	2026
2027		37,750	37,750	70,000	27,100	97,100	50,000	19,613	69,613	25,000	10,675	35,675	145,000	95,138	240,138	2027
2028	120,000	37,750	157,750	70,000	25,000	95,000	50,000	18,113	68,113	30,000	9,925	39,925	270,000	90,788	360,788	2028
2029	120,000	34,150	154,150	70,000	22,900	92,900	50,000	16,613	66,613	30,000	9,025	39,025	270,000	82,688	352,688	2029
2030	120,000	30,550	150,550	75,000	20,800	95,800	50,000	15,113	65,113	30,000	8,125	38,125	275,000	74,588	349,588	2030
2031	120,000	26,650	146,650	75,000	18,363	93,363	55,000	13,488	68,488	30,000	7,150	37,150	280,000	65,650	345,650	2031
2032	120,000	22,750	142,750	80,000	15,925	95,925	60,000	11,700	71,700	30,000	6,175	36,175	290,000	56,550	346,550	2032
2033	120,000	18,850	138,850	80,000	13,325	93,325	60,000	9,750	69,750	30,000	5,200	35,200	290,000	47,125	337,125	2033
2034	120,000	14,950	134,950	80,000	10,725	90,725	60,000	7,800	67,800	30,000	4,225	34,225	290,000	37,700	327,700	2034
2035	115,000	11,050	126,050	80,000	8,125	88,125	60,000	5,850	65,850	35,000	3,250	38,250	290,000	28,275	318,275	2035
2036	115,000	7,313	122,313	80,000	5,525	85,525	60,000	3,900	63,900	35,000	2,113	37,113	290,000	18,850	308,850	2036
2037	110,000	3,575	113,575	90,000	2,925	92,925	60,000	1,950	61,950	30,000	975	30,975	290,000	9,425	299,425	2037
2038			0			0			0			0	0	0	0	2038
																ĺ
Total	1,315,000	596,268	1,911,268	1,330,000	513,110	1,843,110	860,000	359,823	1,219,823	530,000	202,056	732,056	4,035,000	1,671,256	5,706,256	Total





CREDIT OPINION

15 March 2018

Rate this Research



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Whitewater (City of) WI

Update to credit analysis

Summary

The City of Whitewater (Aa3) benefits from a stable economy supported by the institutional presence of the University of Wisconsin at Whitewater. The city has also maintained a healthy and stable financial position. These positive attributes are balanced by the small size of the city's tax base and the debt burden that is higher than that of peers. At the same time, the city carries a modest pension burden compared to other US local governments.

Credit strengths

- » Stable local economy supported by University of Wisconsin at Whitewater
- » Healthy and stable financial position

Credit challenges

- » Small tax base in comparison to peers
- » Above average debt burden

Rating outlook

Moody's does not generally assign outlooks to local governments with this amount of debt.

Factors that could lead to an upgrade

- » Significant tax base growth
- » Sustained growth in fund balance and liquidity

Factors that could lead to a downgrade

- » Tax base contraction or downsizing of the local university, a major component of the city's economy
- » Sustained operational imbalance that degrades fund balance or liquidity
- » Material growth in the city's debt or pension burdens

Key indicators

Exhibit 1

Whitewater (City of) WI	2012	2013	2014	2015	2016
Economy/Tax Base					
Total Full Value (\$000)	\$617,822	\$625,861	\$625,192	\$640,750	\$645,399
Population	14,385	14,570	14,801	14,866	14,866
Full Value Per Capita	\$42,949	\$42,955	\$42,240	\$43,102	\$43,414
Median Family Income (% of USMedian)	91.7%	89.4%	81.0%	78.1%	78.1%
Finances					
Operating Revenue (\$000)	\$11,537	\$11,347	\$10,930	\$10,750	\$11,520
Fund Balance (\$000)	\$2,957	\$3,141	\$2,986	\$2,873	\$2,706
Cash Balance (\$000)	\$2,936	\$3,336	\$3,228	\$3,297	\$2,994
Fund Balance as a % of Revenues	25.6%	27.7%	27.3%	26.7%	23.5%
Cash Balance as a % of Revenues	25.4%	29.4%	29.5%	30.7%	26.0%
Debt/Pensions					
Net Direct Debt (\$000)	\$22,202	\$20,703	\$21,490	\$18,455	\$17,133
3-Year Average of Moody's ANPL (\$000)	\$3,375	\$4,157	\$5,953	\$8,274	\$11,890
Net Direct Debt / Operating Revenues (x)	1.9x	1.8x	2.0x	1.7x	1.5x
Net Direct Debt / Full Value (%)	3.6%	3.3%	3.4%	2.9%	2.7%
Moody's - adjusted Net Pension Liability (3-yr average) to Pevenues (x)	0.3x	0.4x	0.5x	0.8x	1.0x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	0.5%	0.7%	1.0%	1.3%	1.8%

Source: Whitewater audited financial statements, Moody's Investors Service

Profile

Whitewater, WI is located 45 miles southeast of Madison and 55 miles southwest of Milwaukee and has an estimated population of 14,390. The city is home to the University of Wisconsin at Whitewater which, with an enrollment of 12,346, has a significant influence on the local economy.

Detailed credit considerations

Economy: small local economy supported by university presence

Whitewater's small local economy will remain stable over the long run due to the institutional presence of the University of Wisconsin at Whitewater. The city lies 45 miles southeast of Madison (Aaa stable) and 55 miles southwest of Milwaukee (A1 stable). The local economy is dominated by the UW-Whitewater campus and, while the university's property is tax-exempt and unavailable as a taxable resource, the university is the city's largest employer with 1,365 employees and a total enrollment of 12,346 as of 2016. City officials report a gradual increase in development activities within the city, particularly within the industrial sector. A small business incubator created by the university has encouraged business creation and several existing industrial entities are expanding facilities.

The city's total equalized valuation grew at an average annual rate of 1% over the past five years, but 2017 valuation remains small at \$647 million. Due to the combination of student housing and industrial entities within the city, the tax base is fairly concentrated with the top ten taxpayers accounting for 22% of total valuation. The largest taxpayer, DLK Rentals, owns a variety of residential properties throughout the city and accounts for 8% of the total valuation.

As is common among cities with a large university presence, Whitewater's resident income metrics are below average. The median family income within the city is 78% of the national level and valuation per capita is low at \$44,553. Walworth County unemployment is low at 2.7% as of December 2017.

Financial operations and reserves: healthy and stable financial position

The city's financial position is healthy and is expected to remain stable over the long run. Following a slight general fund deficit in the fiscal year ending December 31, 2016, the city's available general fund balance remained healthy at \$2.2 million or 24% of revenue. The

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available operating funds balance, inclusive of the debt service fund, is also healthy at 24% of revenue. Unaudited financial information provided for fiscal 2017 suggests that the city achieved a small surplus. The city adopted a balanced budget for fiscal 2018 and officials expect break even operations on the year. Over the long run, the city does not plan to draw on reserves.

State aid made up 52% of total revenue in 2016. This includes approximately \$500,000 in state shared utility revenue due to the presence of a natural gas power plant, which is not included in the city's tax base but pays tax on gross receipts to the state which then makes an annual payment to the city. Property taxes accounted for 29% of general fund revenue as of fiscal 2016.

LIQUIDITY

Net cash and equivalents are also healthy as of the fiscal 2016 audit and similar to the available fund balance. General fund net cash was \$2.5 million or 27% of revenue and operating funds net cash was \$3 million or 26% of revenue. Liquidity is expected to increase modestly for fiscal 2017 based on preliminary operating results and the city is not planning any draws on liquidity in the coming years.

Debt and pensions: above average debt burden but low pension burden

Whitewater's debt burden is above average but expected to decline over the next several years based on current borrowing plans. The city's net direct general obligation debt burden is equivalent to 2.7% of 2017 valuation, exclusive of debt supported by the utility funds. This is above the median for cities at the Aa3 rating level nationally, though roughly in line with peers within Wisconsin. Legally, the city's GO debt is supported solely by ad valorem tax revenues however in practice Whitewater supports debt service with water, wastewater, and stormwater utility revenue. City officials plan on issuing an additional \$600,000 in privately placed GO debt later in 2018, although larger borrowing is not anticipated until 2020.

DEBT STRUCTURE

All of the city's debt is fixed rate and 67% of GO principal is scheduled to mature within the next ten years.

DEBT-RELATED DERIVATIVES

The city is not party to any debt-related derivative agreements.

PENSIONS AND OPEB

Whitewater participates in the Wisconsin Retirement System (WRS), a statewide cost sharing plan. The city's contribution to the plan was \$397,000 in fiscal 2016, which represents a low 3.5% of operating revenue. This contribution was 98% of the Moody's determined "tread water" contribution, the contribution at which the reported unfunded liability would remain stable if other plan actuarial assumptions hold. The three-year average Moody's adjusted net pension liability (ANPL) is 1.03x operating revenue and 1.8% of valuation, both ratios modest compared to US local government peers.

Moody's ANPL reflects the use of a market-based interest rate to value accrued liabilities. The adjustment is not intended to replace the district's reported contribution information, but to improve comparability with other rated entities. For more information on Moody's insights on employee pensions and the related credit impact on companies, government, and other entities across the globe, please visit Moody's on Pensions at www.moodys.com/pensions.

Management and governance: moderate Institutional Framework

Wisconsin cities have an Institutional Framework score of A, which is moderate. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. The sector's major revenue source, property tax revenue, is subject to a cap that restricts cities from increasing their operating property tax levies except to capture amounts represented by net new construction growth. Revenues and expenditures tend to be predictable. Across the sector, fixed and mandated costs are generally high. Expenditures are a bit flexible, as collective bargaining is allowed for public safety employees but is curbed for non-public safety employees.

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